

# CHAPTER 1: INTRODUCTION AND OVERVIEW OF THE PHASE II REPORT

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## Why Study Washington's Aviation System?

*Washington's airports are  
an essential component  
of Washington's multi-  
modal transportation  
system*

Airports function as both valuable transportation assets and economic engines. They are crucial on a local, statewide, and national level to move people and goods, promote business and commerce and contribute to our quality of life. Airports also provide access for critical services such as emergency medical, search and rescue, firefighting, and disaster management activities that other transportation modes could not adequately accommodate. The fact that Washington's airports are an essential component of Washington's multi-modal transportation system has been clearly emphasized in the Governor's strategic economic plan and the Washington State Legislature's 2005 call for this Long-Term Air Transportation Study (LATS).

LATS is a three-phased initiative, with this report representing the second phase of the effort. Each phase answers one of the three basic questions fundamental to the development of a system-wide approach to managing Washington's aviation resources:

*The three phases of  
LATS answer questions  
fundamental to  
developing a system-wide  
approach to manage  
Washington's aviation  
resources*

- **Phase I – What do we have?** – This phase prepared an inventory of statewide aviation activity, airport facilities and capacity and provided an evaluation of existing conditions.
- **Phase II – What do we need?** – Phase II provides a market forecast of future statewide aviation activity and compares that activity to available airport capacity to determine potential capacity shortfalls and identify alternative strategies for meeting regional and statewide demand.
- **Phase III –How will we get there?** – During this policy development phase, a council appointed by the governor will consider the LATS findings and public input to make recommendations regarding how best to meet the state's long term commercial and general aviation needs.

This Phase II technical report presents a market forecast of future aviation activity across the state and compares that activity to available capacity at Washington airports. It serves as the second step towards developing a comprehensive improvement strategy for Washington's aviation system. LATS will help the Governor and state legislature to make decisions and target investments that effectively serve the future air transportation needs of Washington.

## What is the State Airport System that Serves the Needs of Washington Businesses, Residents and Visitors?

*LATS addresses the  
141 public use airports  
open in 2005 in  
Washington State*

LATS addresses the 141 airports in Washington State that were open for public use in 2005. These public airports serve businesses, residents, and visitors in the state, providing important aviation services such as scheduled airline, general aviation, and air cargo service.

A few of the airports included in LATS have closed or have undergone status changes during the course of the study. Evergreen Field, located in Clark County, is included in LATS, although it closed in July 2006. Lester State, located in King County, closed to fixed wing aircraft traffic after flooding destroyed the runway. Hillcrest, located in Klickitat County, is included in LATS, but has since become a private use airport.

The Washington State airport map provided in the Executive Summary shows how the public use airports are distributed across the state. A detailed list of the airports included in LATS is also provided in the technical appendix of the report.

*Sixty-six public use  
airports in  
Washington are  
included in the FAA  
NPIAS*

Nearly half of Washington's public airports are identified as significant to the national airport system by the FAA and included in the FAA's National Plan of Integrated Airports (NPIAS). The NPIAS is updated every two years and provides the basis of apportioning federal Airport Improvement Program (AIP) funding. Sixty-five of the state's public airports are included in the Washington State NPIAS. In addition, one airport, Columbia Gorge Regional, is located in Klickitat County, but is included in the Oregon State NPIAS. Under the federal airport classification system, airports are designated as either *primary airports*, *commercial service airports*, *reliever airports*, or *general aviation airports* based upon the type of service they provide to the community. Airports that are designated as primary airports provide scheduled passenger service and have more than 10,000 annual enplanements. Commercial service airports have between 2,500 and 10,000 annual enplanements. Reliever airports provide general aviation access to the surrounding area and have 100 or more based aircraft and/or 25,000 annual itinerant operations. General aviation airports do not meet the

criteria for reliever airports, but still account for significant general aviation activity.

*State airport  
classifications  
supplement FAA  
classifications and help  
identify and prioritize  
airport improvement and  
funding needs*

Of the sixty-six NPIAS airports in Washington State, there are 11 primary airports, three commercial service airports, five reliever airports, and 47 general aviation airports. The maps on the following pages show how the NPIAS and non-NPIAS airports are distributed across Washington. A detailed summary of each airport by FAA classification can be found in the technical appendix of the report.

Many states also classify airports according to their roles within the state air transportation systems, accounting for typical airport activities and facilities and services available at the airport. As a component of LATS, WSDOT Aviation has also developed state airport classifications for the public use airports in the state. State airport classifications do not supersede FAA classifications, but supplement them by accounting also for airports that may not be significant on a national level, but are significant to the state aviation system. State airport classifications, along with the identification of facilities and services appropriate for each classification, are important in helping to identify and prioritize airport improvement and funding needs.

The state airport classification and performance measures are discussed in detail in Chapter 4 of the report.

Figure 1A: NPIAS Airports

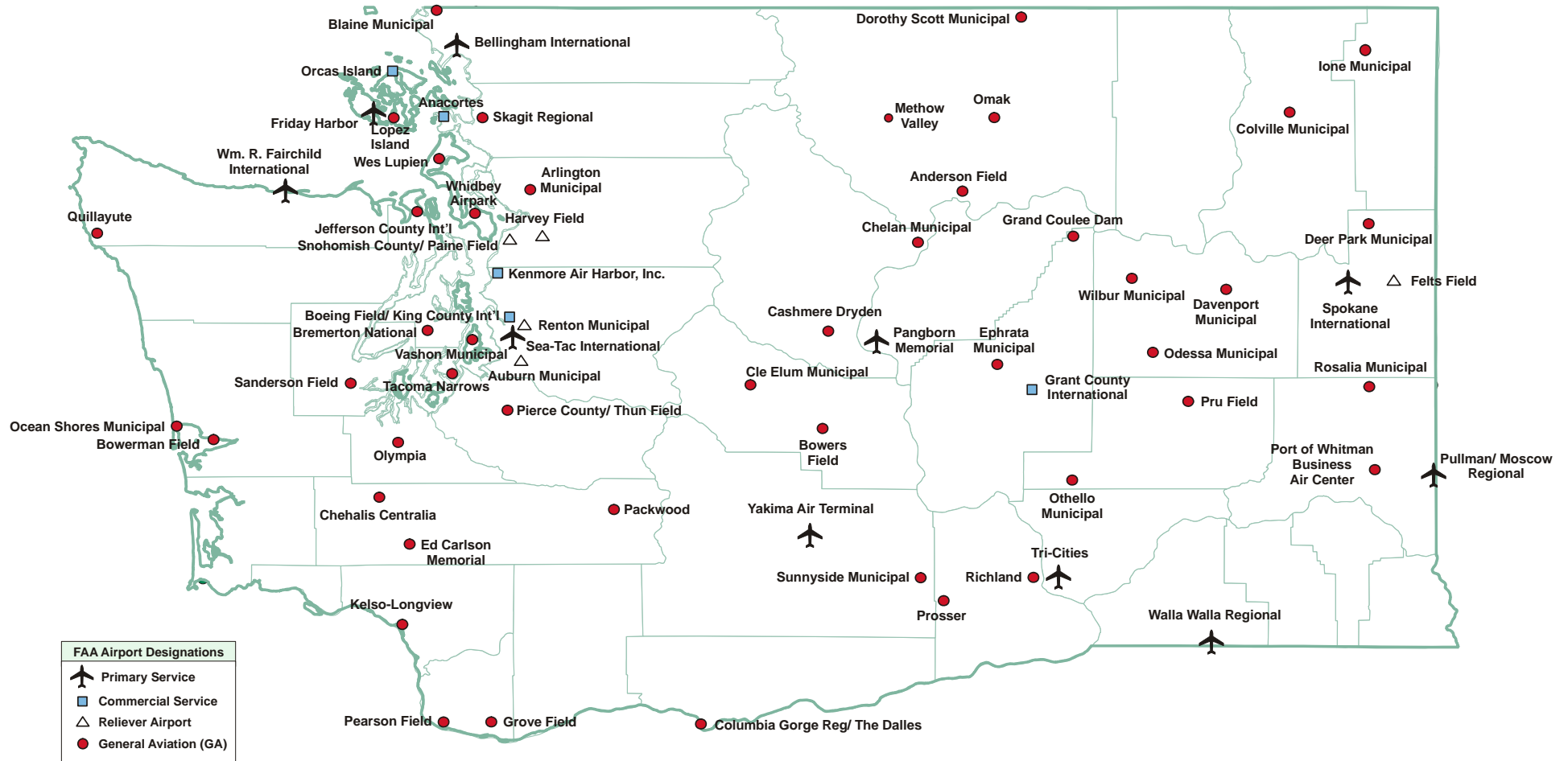
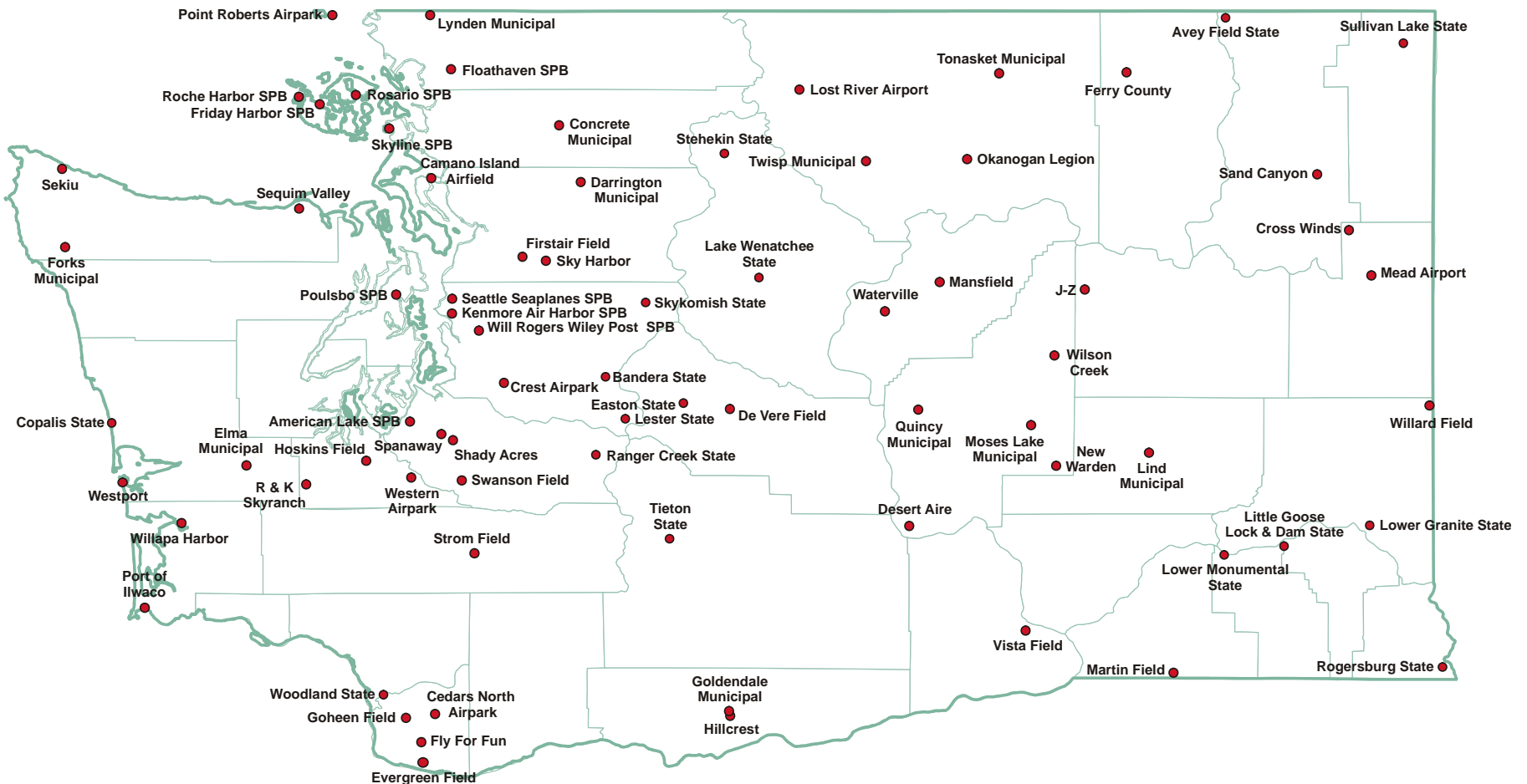


Figure 1B: Non-NPIAS Airports



## How Did We Address Regional Aviation Performance?

Information in this report is presented at four different geographic levels to allow for a better understanding of how different areas of Washington State are served by and have access to the aviation system:

- Statewide level
- Special Emphasis Region level
- Regional Transportation Planning Organization (RTPO) level
- Individual airport level

### Statewide Level

LATS findings will be incorporated into the statewide multimodal transportation plan, the Washington Transportation Plan (WTP), which addresses state-owned and state-interest transportation facilities. A major emphasis of WTP is the improvement and integration of all transportation modes to create a seamless intermodal transportation system for people, goods and services. Plans developed as part of WTP must be consistent with the state transportation policy plan and each other, reflect public involvement, be consistent with regional transportation planning, high-capacity transportation planning, and local comprehensive plans prepared under chapter 36.70A RCW, and include analysis of intermodal connections and choices.

### Special Emphasis Regions

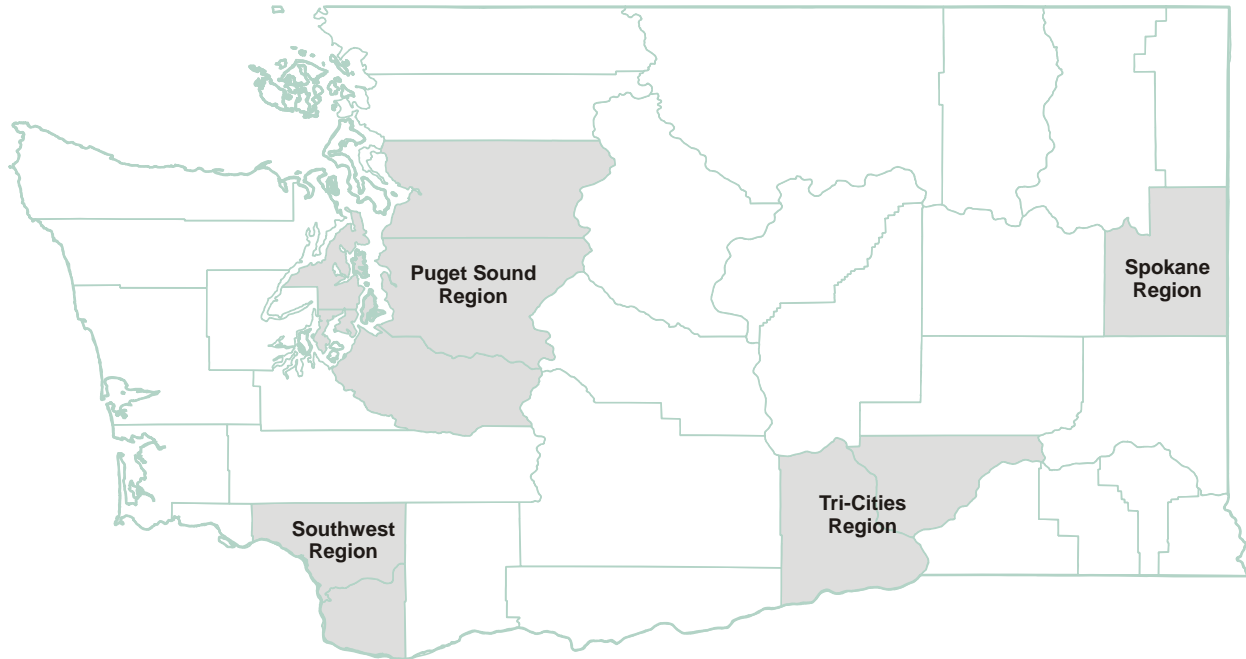
The Washington State Legislature specifically designated four geographic areas as warranting more detailed analysis than the remainder of the state because they constitute key centers of population, employment and economic activity. Activity within these regions has been recognized as being vital to the overall economy of the state. The four designated areas are:

- The Puget Sound Region, consisting of King, Snohomish, Pierce, and Kitsap Counties.
- Southwest Washington, consisting of Clark and Cowlitz Counties.
- Spokane Region, consisting of Spokane County.
- The Tri-Cities area, consisting of Benton and Franklin Counties.

Figure 2 shows the location of these Special Emphasis Regions. Within these areas it is deemed necessary to assure that both commercial service (passenger and cargo) and general aviation facilities are adequate, not only for current conditions, but also to support future economic growth.

Without adequate air transportation, the future growth of population and overall economic conditions could be adversely impacted.

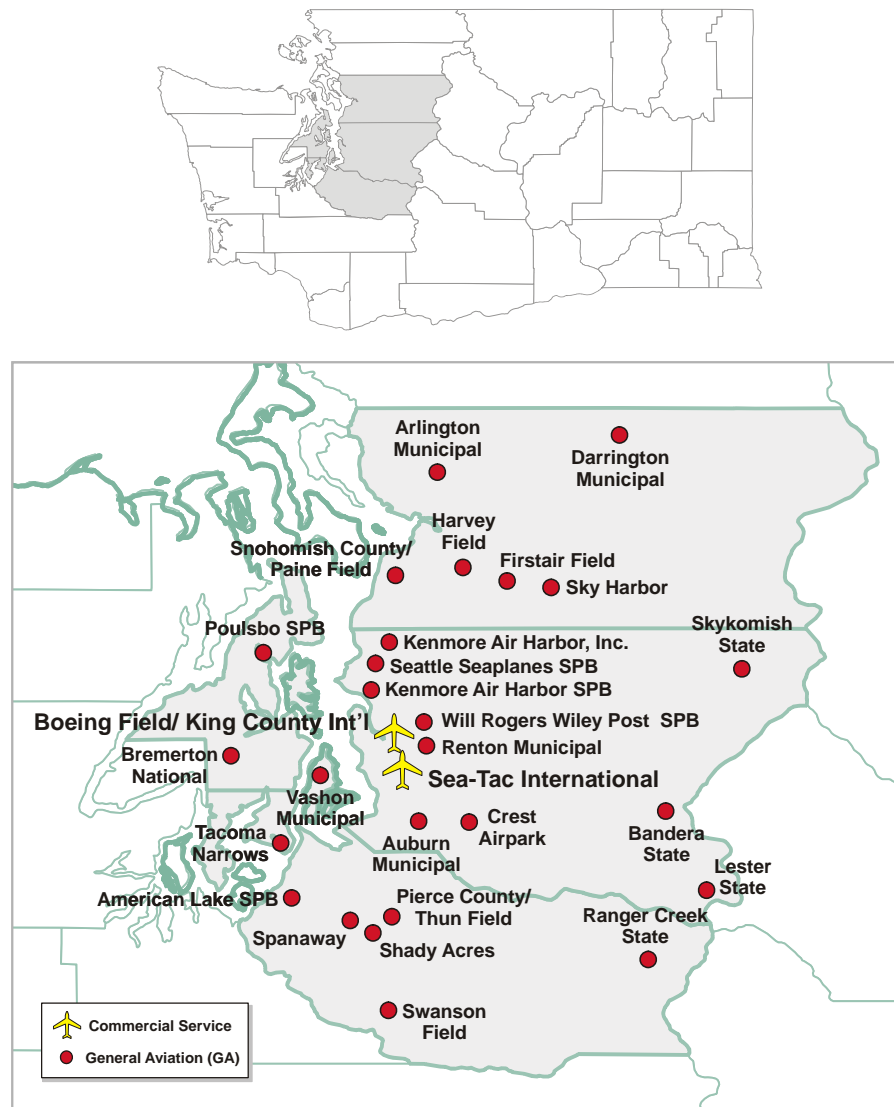
**Figure 2: Washington State Special Emphasis Regions**



### ***Puget Sound Region***

The Puget Sound Region represents the most populated region in Washington State and the busiest aviation area. The region identified encompasses King, Snohomish, Pierce, and Kitsap Counties. This is the same area as the PSRC RTPO district. In 2005, the population in the region totaled 3.5 million, approximately 55 percent of total Washington State population. Approximately 14.3 million annual enplanements were reported in the region in 2005, representing the bulk of the 16.5 million total annual enplanements reported in the entire state. The PSRC has been active in airport planning and development issues for the 28 airports within their region as shown and listed below.

**Figure 3: Puget Sound Region**

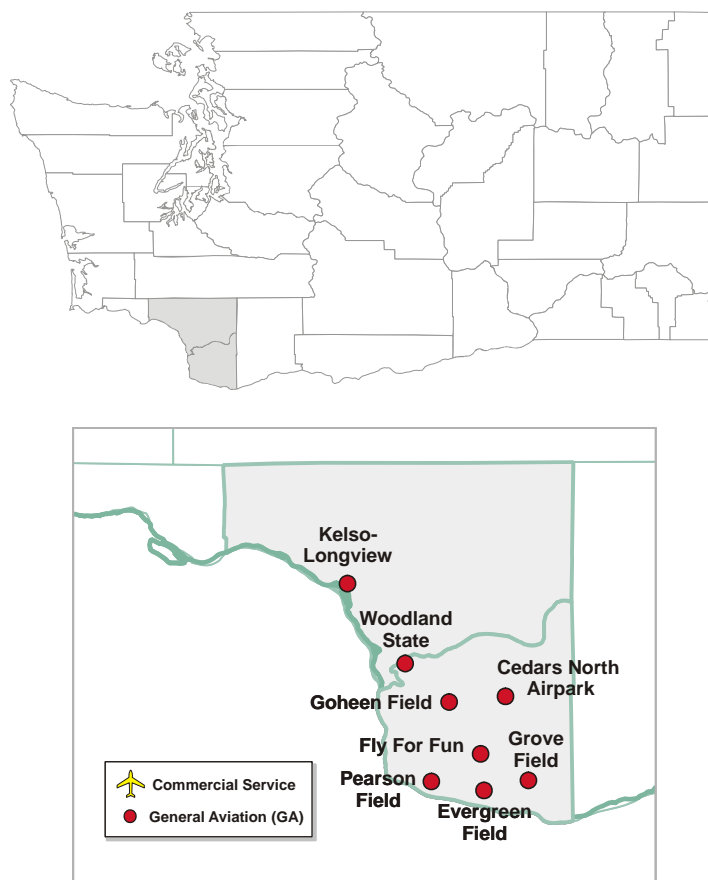




## Southwest Region

The Southwest Region, identified by the legislature, encompasses Cowlitz and Clark Counties and includes eight<sup>1</sup> airports. Four of these airports are privately-owned, public use airports. The population in the region in 2005 was approximately 500,000. Scheduled commercial service was not reported at airports in the region in 2005.

**Figure 4: Southwest Region**



Capacity and demand within the Southwest Region is complicated by the fact that the dominant airport for the region is located in another state. The Portland International Airport (PDX) is just south of the region, across the Columbia River. Although separated from Washington by the river and a political boundary, Portland International Airport provides all passenger and cargo service for the region. Additionally, general aviation demand and capacity are influenced by the three active GA facilities located within the state of Oregon and controlled by the Port of Portland that provide capacity for GA growth in this region. The influence of

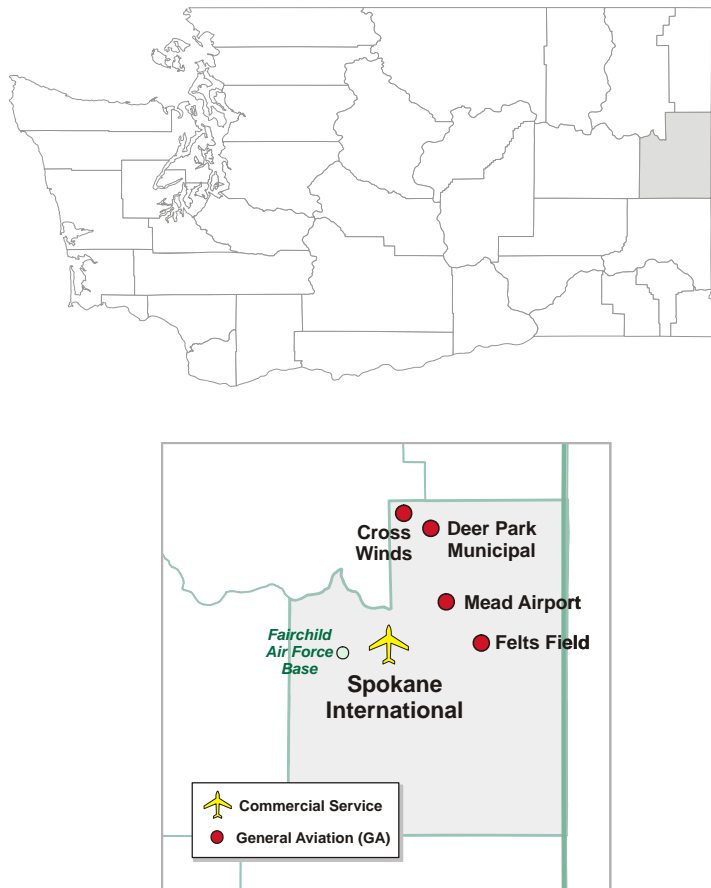
<sup>1</sup> Evergreen Field, which closed in July 2006, is one of the eight airports.

Oregon airports on Southwest Washington has increased in recent years following the closure of several privately-owned airports in the region.

### ***Spokane Region***

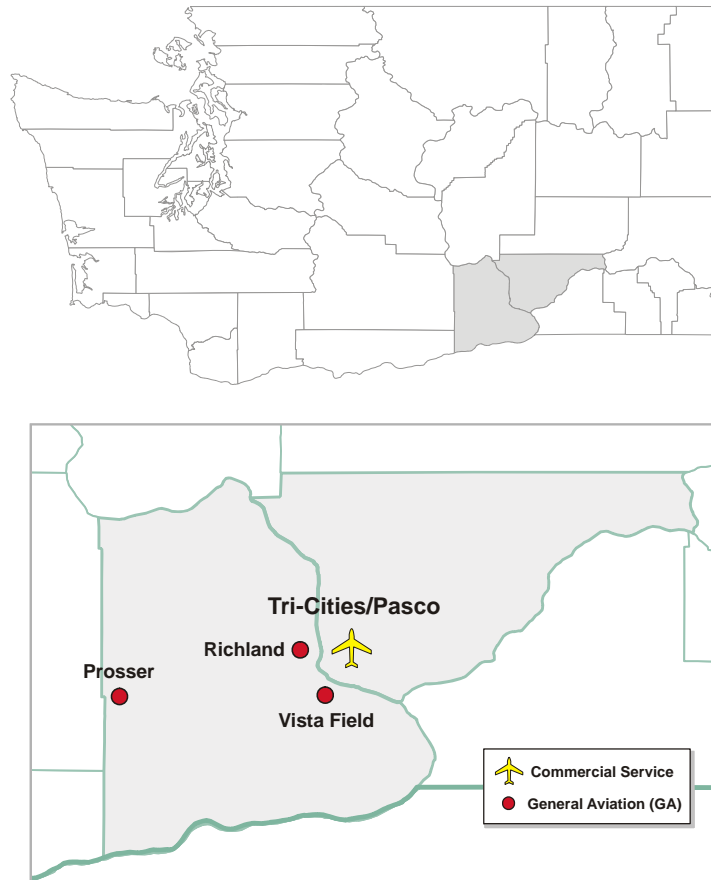
The Spokane Region, identified by the legislature, encompasses Spokane County and five airports. In addition, Fairchild Air Force Base is located within the region. The population in the region in 2005 was approximately 440,000. A total of 1.6 million annual enplanements were reported at airports in the region in 2005.

**Figure 5: The Spokane Region**



## *Tri-Cities Region*

**Figure 6: The Tri-Cities Region**



The Tri-Cities Region includes four airports located within Franklin and Benton Counties. The population in the region in 2005 was approximately 220,000. A total of 240,000 annual enplanements were reported at airports in the region in 2005.

## **Regional Transportation Planning Organizations (RTPO)**

Consistent with WSDOT's emphasis on integration with regional and local planning, LATS also includes a regional evaluation of the aviation system to connect LATS findings with WSDOT's transportation planning partners, including local, regional and state agencies. Information is provided for Washington's 14 RTPOs, which cover 38 of the state's 39 counties. These organizations develop regional transportation plans and coordinate regional transportation planning among cities, counties, port authorities, public transportation providers, WSDOT and other agencies.

The planning areas covered by each organization are shown in the map in Figure 7.

**Figure 7: Washington Regional and Metropolitan Transportation Planning Organizations**

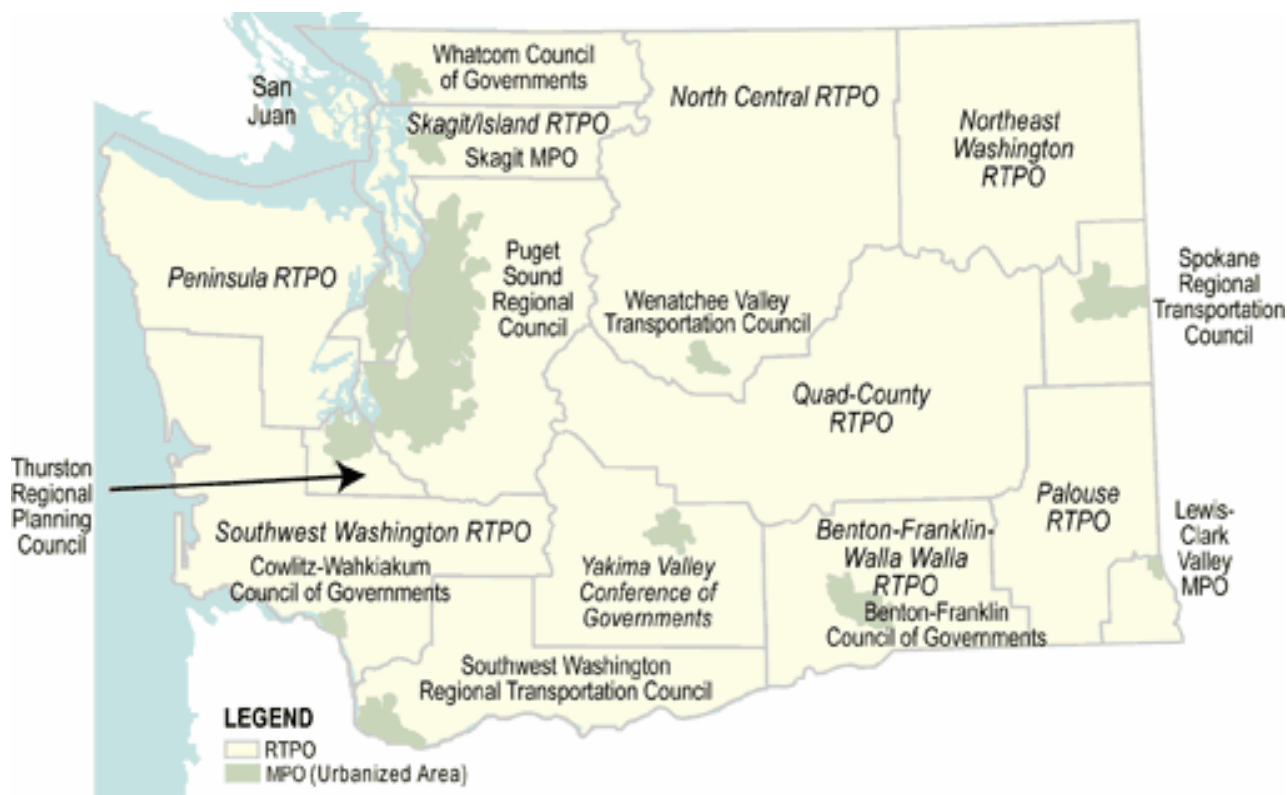


Figure 8 lists the RTPOs and the number of airports located within each RTPO. This report summarizes airport demand and capacity by RTPO in order to facilitate meaningful regional analysis of airport and ground transportation systems, land use planning issues, and airport development constraints. This approach will also facilitate participation of the RTPOs and MPOs in LATs, as appropriate to the role each airport plays within each planning region.

**Figure 8: Washington Public Use Airports by RTPO**

Regional Transportation Planning Organization (RTPO)	Number of Airports
Benton-Franklin-Walla Walla RTPO	7
North Central RTPO	15
Northeast Washington RTPO	6
Palouse RTPO	7
Peninsula RTPO	7
Puget Sound Regional Council	28
Quad-County RTPO	19
Skagit/Island RTPO	7
Southwest Washington Regional Transportation Council	9
Southwest Washington RTPO	13
Spokane Regional Transportation Council	5
Thurston Regional Planning Council	4
Whatcom Council of Governments	5
Yakima Valley Council of Governments	3
No RTPO – San Juan Islands	6

### Individual Airports

The Phase II report includes analysis of data collected for each individual airport in the state aviation system. This information is available in the technical memoranda provided in the appendices.

## Objectives and Key Components of Phase II

The main objectives of Phase II of LATS are:

- Understanding the expected future growth in aviation activity in Washington State on a statewide, regional, and individual airport basis.
- Determining where existing airport capacity and facility attributes must be expanded or enhanced to effectively satisfy future demand.

Phase II, building upon Phase I, will assist the Governor's Council in making informed decisions and provide the analytic foundation to meet the following objectives:

1. Make recommendations regarding how best to meet the statewide commercial and general aviation capacity needs.

2. Determine which regions of the state are in need of airport facility improvement and the long-range capacity needs at airports within the regions.
3. Make recommendations regarding the placement of future commercial and general aviation airport facilities.

Key areas of analysis conducted during Phase II include the following:

- A review of national and state aviation trends.
- Individual market analyses specifically pertaining to Washington's commercial airports.
- Forecasts of future aviation activity in Washington, including airline passenger traffic, air cargo, and general aviation activity.
- A determination of future capacity shortfalls at the individual airport and regional levels.
- An analysis and update of the State Airport Classification System proposed in Phase I.
- A refinement of performance objectives designed to quantify current airport system performance and the benefits associated with potential facility enhancements.
- A review of current programs to enhance rail service in Washington State and an assessment of the impact that future rail system development will have on future aviation system needs within the state.
- Planning for the Phase III Governor's Aviation Planning Council process that will produce recommendations for meeting the current and future aviation needs of residents, businesses and visitors to Washington State.

## **What Will You Find in this Report?**

The following sections of this report present the analysis and findings of the LATs study team within each of these focus areas:

### ***Aviation Trends, Chapters 2 & 3***

Describes trends in the airline industry and in general aviation that are expected to have significant impact on Washington's air transportation system in the next 25 years.

### ***State Airport Classification System, Chapter 4***

Introduces a classification system for Washington's airports and provides a facility assessment based on selected performance objectives.

### ***Airport Forecasts, Chapters 5-8***

Estimate future aviation activity in Washington State.

### ***Aviation System Capacity Analysis, Chapters 9-15***

Compares estimated levels of future activity to existing airport facilities to identify shortfalls. Also includes an assessment of planned high speed rail improvements and their potential impacts on the State's aviation system.

### ***Key Findings and Next Steps, Chapters 16 & 17***

Summarizes the most significant results of the Phase II analysis and describes how the information will be used in Phase III.

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